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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,921	06/20/2006	Roger Kennedy	P410656US	4758
1218	7590	08/27/2007	EXAMINER	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,921

Applicant(s)

KENNEDY, ROGER

Examiner

HYDER ALI

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-10,26 and 46-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-10,26 and 46-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/20/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-3,5,7-10,26,47-49 rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1-7 of U.S.

Patent No. 7,171,959. Although the conflicting claims are not identical, they are not patentably distinct from each other because they have the same structure and scope.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3,5,7-10,26,47-49 rejected under 35 U.S.C. 102(e) as being anticipated by Kennedy (7,171,959).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to Claim 1, **Kennedy** discloses a regulator for increasing the efficiency of an engine, the regulator being locatable in or adjacent to an engine manifold and comprising a propeller 703 connected to a power supply for driving the propeller 703, and a means for mounting the propeller 703 in the manifold, the propeller 703 having a longitudinal pin 705 defining a rotation axis and at least one blade 703 attached to the pin 705 by

means of an elongated blade root which substantially follows the longitudinal axis of the pin. **See col. 7, lines 35-55 and col. 8, lines 1-20.**

As to Claim 2, **Kennedy** discloses wherein the blade root follows the longitudinal axis of the pin in an at least partial helical manner.

As to Claim 3, **Kennedy** discloses wherein the length of the blade root is greater than the distance between the blade tip and the pin.

As to Claim 5, **Kennedy** discloses comprising at least one perforated element capable of allowing the passage of fluid material therethrough, and a means for mounting the perforated element in the manifold.

As to Claim 7, **Kennedy** discloses wherein the blade has a substantially smoothly curving blade edge.

As to Claim 8, **Kennedy** discloses wherein the blade has a shape substantially of an ellipse, a part ellipse, a teardrop, a half-teardrop, a bell curve, or a half-bell curve.

As to Claim 9, **Kennedy** discloses wherein the blade is relatively wider towards one end of the blade root.

As to Claim 10, **Kennedy** discloses wherein the propeller is effective to pull fluid material from a region upstream of the propeller to a region downstream of the propeller and cause turbulent flow in the region downstream thereof.

As to Claim 26, **Kennedy** discloses wherein the propeller is mounted such that the axis of the propeller is between 0.5° to 60° with respect of the longitudinal axis of the manifold.

As to Claim 46, **Kennedy** discloses wherein the propeller is mounted beneath the perforated element.

As to Claim 47, **Kennedy** discloses a regulator for increasing the efficiency of an engine, the regulator being locatable in or adjacent to an engine manifold and comprising at least one perforated element capable of allowing a passage of fluid material therethrough, means for mounting the perforated element in the manifold a propeller connected to a power supply for driving the propeller, and means for mounting the propeller in the manifold beneath the perforated element, the propeller having a longitudinal pin defining a rotational axis and at least one blade attached to the pin by an elongated blade root which substantially follows the longitudinal axis of the pin in at least partial helical manner, the blade of the propeller being relatively wider towards one end of the blade root, the length of the blade root being greater than a distance between the pin and a tip of the blade. **See col. 7, lines 35-55 and col. 8, lines 1-20.**

As to Claim 48, **Kennedy** discloses wherein the blade has a substantially smoothly curving blade edge.

As to Claim 49, **Kennedy** discloses wherein the propeller is mounted so that the axis of the propeller is between 0.5° to 60° with respect to a longitudinal axis of the manifold.

3. Claims 1-3,5,7-10,26,47-49 rejected under 35 U.S.C. 102(b) as being anticipated by Kennedy (WO-02/086304).

As to Claim 1, **Kennedy** discloses a regulator for increasing the efficiency of an engine, the regulator being locatable in or adjacent to an engine manifold and comprising a propeller 703 connected to a power supply for driving the propeller 703, and a means

for mounting the propeller 703 in the manifold, the propeller 703 having a longitudinal pin 705 defining a rotation axis and at least one blade 703 attached to the pin 705 by means of an elongated blade root which substantially follows the longitudinal axis of the pin. **See pages 17-18 and FIGS. 7-9.**

As to Claim 2, **Kennedy** discloses wherein the blade root follows the longitudinal axis of the pin in an at least partial helical manner.

As to Claim 3, **Kennedy** discloses wherein the length of the blade root is greater than the distance between the blade tip and the pin.

As to Claim 5, **Kennedy** discloses comprising at least one perforated element capable of allowing the passage of fluid material therethrough, and a means for mounting the perforated element in the manifold.

As to Claim 7, **Kennedy** discloses wherein the blade has a substantially smoothly curving blade edge.

As to Claim 8, **Kennedy** discloses wherein the blade has a shape substantially of an ellipse, a part ellipse, a teardrop, a half-teardrop, a bell curve, or a half-bell curve.

As to Claim 9, **Kennedy** discloses wherein the blade is relatively wider towards one end of the blade root.

As to Claim 10, **Kennedy** discloses wherein the propeller is effective to pull fluid material from a region upstream of the propeller to a region downstream of the propeller and cause turbulent flow in the region downstream thereof.

As to Claim 26, **Kennedy** discloses wherein the propeller is mounted such that the axis of the propeller is between 0.5° to 60° with respect of the longitudinal axis of the manifold.

As to Claim 46, **Kennedy** discloses wherein the propeller is mounted beneath the perforated element.

As to Claim 47, **Kennedy** discloses a regulator for increasing the efficiency of an engine, the regulator being locatable in or adjacent to an engine manifold and comprising at least one perforated element capable of allowing a passage of fluid material therethrough, means for mounting the perforated element in the manifold a propeller connected to a power supply for driving the propeller, and means for mounting the propeller in the manifold beneath the perforated element, the propeller having a longitudinal pin defining a rotational axis and at least one blade attached to the pin by an elongated blade root which substantially follows the longitudinal axis of the pin in at least partial helical manner, the blade of the propeller being relatively wider towards one end of the blade root, the length of the blade root being greater than a distance between the pin and a tip of the blade. **See pages 17-18 and FIGS. 7-9.**

As to Claim 48, **Kennedy** discloses wherein the blade has a substantially smoothly curving blade edge.

As to Claim 49, **Kennedy** discloses wherein the propeller is mounted so that the axis of the propeller is between 0.5° to 60° with respect to a longitudinal axis of the manifold.

4. Claims 1-3,5,7-10,26,46 are rejected under 35 U.S.C. 102(b) as being anticipated by McCauley (4,059,082).

As to Claim 1, McCauley discloses a regulator for increasing the efficiency of an engine, the

regulator being locatable in or adjacent to an engine manifold and comprising a propeller 42,84 connected to a power supply for driving the propeller, and a means for mounting the propeller in the manifold 66, the propeller having a longitudinal pin 44,102 defining a rotation axis and at least one blade attached to the pin by means of an elongated blade root which substantially follows the longitudinal axis of the pin.

As to Claim 2, McCauley discloses wherein the blade root follows the longitudinal axis of the pin in an at least partial helical manner.

As to Claim 3, McCauley discloses wherein the length of the blade root is greater than the distance between the blade tip and the pin.

As to Claim 5, McCauley discloses comprising at least one perforated element capable of allowing the passage of fluid material therethrough, and a means for mounting the perforated element in the manifold.

As to Claim 7, Smith discloses wherein the blade has a substantially smoothly curving blade edge.

As to Claim 8, McCauley discloses wherein the blade has a shape substantially of an ellipse, a part ellipse, a teardrop, a half-teardrop, a bell curve, or a half-bell curve.

As to Claim 9, McCauley discloses wherein the blade is relatively wider towards one end of the blade root.

As to Claim 10, McCauley discloses wherein the propeller is effective to pull fluid material from a region upstream of the propeller to a region downstream of the propeller and cause turbulent flow in the region downstream thereof.

As to Claim 26, McCauley discloses wherein the propeller is mounted such that the axis of the propeller is between 0.5° to 60° with respect of the longitudinal axis of the manifold.

As to Claim 46, **McCauley** discloses wherein the propeller is mounted beneath the perforated element (optional design choice).

5. Claims 1-3,5,7-10,26,46 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (1,614,322).

As to Claim 1, Smith discloses a regulator for increasing the efficiency of an engine, the regulator being locatable in or adjacent to an engine manifold and comprising a propeller 14 connected to a power supply 1 for driving the propeller 14, and a means for mounting the propeller 14 in the manifold 2,8, the propeller 14 having a longitudinal pin defining a rotation axis and at least one blade 14 attached to the pin by means of an elongated blade root which substantially follows the longitudinal axis of the pin.

As to Claim 2, Smith discloses wherein the blade root follows the longitudinal axis of the pin in an at least partial helical manner.

As to Claim 3, Smith discloses wherein the length of the blade root is greater than the distance between the blade tip and the pin.

As to Claim 5, Smith discloses comprising at least one perforated element 12 capable of allowing the passage of fluid material therethrough, and a means for mounting the perforated element in the manifold 2,8.

As to Claim 7, Smith discloses wherein the blade 14 has a substantially smoothly curving blade edge.

As to Claim 8, Smith discloses wherein the blade 14 has a shape substantially of an ellipse, a part ellipse, a teardrop, a half-teardrop, a bell curve, or a half-bell curve.

As to Claim 9, Smith discloses wherein the blade 14 is relatively wider towards one end of the blade root.

As to Claim 10, Smith discloses wherein the propeller is effective to pull fluid material from a region upstream of the propeller to a region downstream of the propeller and cause turbulent flow in the region downstream thereof.

As to Claim 26, Smith discloses wherein the propeller is mounted such that the axis of the propeller is between 0.5° to 60° with respect of the longitudinal axis of the manifold.

As to Claim 46, Smith discloses wherein the propeller is mounted beneath the perforated element (optional design choice).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Kirk Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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